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PLASTEC REPORT 8

**SUBJECT INDEX, BIBLIOGRAPHY, AND CODE  
DESCRIPTION OF TECHNICAL CONFERENCE  
PAPERS ON PLASTICS:  
MARCH 1960 - FEBRUARY 1961**



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PLASTEC Report 6 OTS PB 171037	METHODS OF BONDING FLUOROCARBON PLASTICS TO STRUCTURAL MATERIALS, by Marjorie C. St. Cyr	- - -
PLASTEC Report 7 OTS PB 171038	GUIDE TO SPECIFICATIONS ON PLASTIC LAMINATES, by Ruth Kobler (under publication)	- - -
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**SUBJECT INDEX, BIBLIOGRAPHY, AND CODE DESCRIPTION OF  
TECHNICAL CONFERENCE PAPERS ON PLASTICS:**

**MARCH 1960 — FEBRUARY 1961**

**By**

**Arnold E. Molzon**

**Plastics Technical Evaluation Center**

## **ABSTRACT**

The papers presented at the technical conferences on plastic materials and related technology, within a 1-year period ending on 15 February 1961, have been listed and indexed by subject. Over 450 papers from 14 conferences are covered. This report serves as a guide to the subjects presented, and by means of a code system, it tells the reader what type of information each article contains. Included are a bibliography and identification of the company affiliations of the authors.

The conferences were: Spring and Fall meetings, American Chemical Society (Division of Paint, Plastics, and Printing Ink Chemistry); 3d Annual Conference on the Application of Electrical Insulation; 15th Annual Meeting of the American Rocket Society; Industrial Glass Fabric Design Engineering Symposium; Symposium on Processing Materials for Re-entry Structures; 17th Annual Technical Conference of the Society of Plastics Engineers; Conference on Plastics in Business Machines; Conference on Plastics vs. Corrosion; 16th Annual Technical and Management Conference of the Reinforced Plastics Division of the Society of the Plastics Industry; 6th JANAF Conference on Elastomer Research and Development; 9th Annual Conference on Technical Progress in Communication Wire and Cable; National Academy of Science Conference on Electrical Insulation; and Conference on Coatings for the Aerospace Environment.

#### **ACKNOWLEDGMENT**

The author wishes to acknowledge the valuable assistance given by members of commercial and Government facilities in producing this report. Miss Virginia Valerie and Mrs. Dorothy Stivers were particularly helpful.



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## 1. INTRODUCTION

The number and frequency of technical conferences on plastic materials, applications, and related technology have increased over the past few years. A point has been reached at which it is impossible for the average engineer to keep up with the new developments or to put to use the mass of technical data presented at such meetings, without laborious searching. Time for this searching is a luxury which the military application engineer does not have.

Generally, the most up-to-date information has been made available through the publications emanating from these conferences. Commensurate with its high value, it deserves wider dissemination than is achieved by the intra-group distribution which is usually given to the preprints and proceedings of such meetings.

Little has been done in the past to identify the subjects covered in such conferences within a cross-reference system so that one can rapidly determine (1) what has been presented on a particular subject or (2) what particular information and/or data are contained in each paper. This report is intended to fulfill this need — one document covering the output of the major domestic conferences within a 1-year period ending February 1961.

Only conferences for which preprints or proceedings were issued, or which are in some permanent published record, have been included in this report. Some conferences have thus been omitted. It is expected that the next report (depending upon the reception of this one) will consider others, especially foreign conferences. Comments will be welcomed.

The Plastics Technical Evaluation Center does not have copies of the publications for distribution. It recommends that the interested reader contact the society which promoted or the group which sponsored the meeting at which the particular paper was presented. As an alternative, the reader may contact the (or an) author of the paper of interest. Fair coverage of author affiliation has been included in BIBLIOGRAPH and in AUTHOR AFFILIATION — LIMITED DIRECTORY.

## 2. ORGANIZATION

### CODE SHEET

The code sheet is based on the area designations used by the Society of Plastics Engineers in their annual conferences. These are: General (1), Materials (2), Properties (3), Processes and Processing Equipment (4), Intermediate Products (5), Applications (6), and Research (7). Within these general areas, the specifics are coded in subdigits, for example: low temperature properties (3.10), high temperature properties (3.11); laminating (4.4), blow molding (4.5); test methods (1.1), hazards (1.7), specifications (1.10). Thus, the code sheet gives the numerical reference key to the type of information presented in the particular conference paper.

Two code sheets are provided for simplification of handling. One is in the forepart of the report, opening out on the verso side of the sheet for left-side reference. The other is at the rear of the report, in recto position, for right-side usage.

### SUBJECT INDEX

The subject index is presented in three horizontal parts: subject, code designations, and reference number.

The principal subjects discussed in the presentations are listed alphabetically and margined. The variations upon the principal subject are sublisted and indented, in alphabetical order also. In cases in which the same variation is cited in multiple papers, the variation is repeated for each instance. A typical example is the first subject: Ablation. The variations on this subject are: heat shield, high heat rates, materials evaluation, materials evaluation, materials evaluation, and nozzle.

The code designations are for the areas of information on the subject or variation, as covered within the referenced conference paper. For example, in Reference No. 147, "heat shield" is discussed as it relates to: thermal data (3.5), ablative data (3.12), application in spacecraft, aircraft, rockets (6.4), and research analysis, theoretical (7.2). In this usage, the code is thus a guide for the reader, in determining whether the particular reference contains what he is looking for.

In another application, the code designations provide a means for determining in what conference reports a particular area of information is discussed. For example, if the reader wished to know whether safety or hazards had been considered within the conferences, he would scan the code designations in the subject index for the code 1.7. He would find that hazards had not been a live issue; but that Reference No. 219 had touched upon the subject. If the reader wished to find all the articles on epoxy materials, he would check the variations under the subject "epoxy" for those papers dealing primarily with them; and then check all code designations within the subject index for 2.3, to locate other papers which, while dealing primarily with another subject, contain some information on epoxies. The code system is thus a means of cross-reference in the widest sense. For ease in scanning the code designations for this purpose, the codes are cited in numerical progression within the individual listings.

The reference numbers are those which were assigned, for this report, to the conference presentations. They appear on the margins of the BIBLIOGRAPHY. The bibliographical listings identify the title of the presentation, its author(s), and a company affiliation. The papers are listed under the headings identifying the conferences at which they were presented; and in the proceedings of which the report may be found.

## BIBLIOGRAPHY

The bibliography lists the presentations within the fourteen conferences covered and in the order in which they appear in the published proceedings. The conferences were:

Division of Paint, Plastics and Printing Ink Chemistry, at the 137th National Meeting, April 1960, Cleveland. The American Chemical Society.

Division of Organic Coatings and Plastics Chemistry, at the 138th National Meeting, September 1960, New York. The American Chemical Society. Volume 20, Number 2.

National Conference on the Application of Electrical Insulation, Third Annual, December 1960, Chicago. Cosponsored by: American Institute of Electrical Engineers, and National Electrical Manufacturers Association.

Fifteenth Annual Meeting, December 1960, Washington, D. C. The American Rocket Society.

Industrial Glass Fabric Design Engineering Symposium, May 1960, New York. Sponsored by: Owens-Corning Fiberglas Corporation.

**Symposium on Processing Materials for Re-Entry Structures, May 1960, Wright-Patterson Air Force Base, Ohio. Sponsored by: Materials Central, Wright Air Development Division. Published as: WADD Technical Report 60-58.**

**Seventeenth Annual Technical Conference (ANTEC), January 1961, Washington, D. C. Sponsored by: The Baltimore-Washington Section, Society of Plastics Engineers, Inc.**

**Regional Technical Conference, "Plastics in Business Machines," September 1960, Binghamton, N. Y. Sponsored by: The Binghamton Section, Society of Plastics Engineers, Inc.**

**Regional Technical Conference, "Plastics vs. Corrosion," October 1960, San Francisco, California. Sponsored by: The Golden Gate Section, Society of Plastics Engineers, Inc.**

**Sixteenth Annual Technical and Management Conference, February 1961, Chicago, Illinois; Reinforced Plastics Division, The Society of the Plastics Industry, Inc.**

**Conference on Elastomer Research and Development, Sixth Joint Army-Navy-Air Force Conference: October 1960, Boston, Massachusetts. Sponsored by: U. S. Army Quartermaster Research and Engineering Command, Natick, Massachusetts.**

**Ninth Annual Conference, "Technical Progress in Communication Wires and Cables," November-December 1960, Asbury Park, New Jersey. Sponsored by: Communications Security Division, U. S. Army Signal Research and Development Laboratory, Fort Monmouth, New Jersey.**

**Conference on Electrical Insulation, October 1960, Washington, D. C. Sponsored by: Division of Engineering and Industrial Research, National Academy of Sciences -- National Research Council, Washington, D. C., Publication 842, 1961.**

**"Coatings for the Aerospace Environment," November 1960, Dayton, Ohio. Sponsored by: Materials Central, Wright Air Development Division, Dayton, Ohio. Preprint published as WADD Technical Report 60-773.**

When the conferences were subdivided into specific interest segments, the subject headings have been maintained. In one case, the report is in two volumes; these are identified also. As may be noted, assigned publication numbers are included.

The listings include all authors; but in the identification of author affiliation for reports jointly prepared by people from different companies, the company connection of one randomly selected author is given. In such cases, the name of that author is underlined. This establishes a contact on the multiple-affiliation reports without unduly complicating the entry in the bibliography. Simplification has also been the aim in limiting all author affiliations to brief form. The full designations, when available, have been compiled in the **AUTHOR AFFILIATIONS — LIMITED DIRECTORY**.

The Reference Number is the identification media for integration between subject index and bibliography.

#### **AUTHOR AFFILIATIONS — LIMITED DIRECTORY**

In recognition that a need may arise for the contacting of an author, as in a case in which the published conference proceedings are not available to the reader, the brief statements of affiliation have been expanded in this limited directory.

This listing is limited to those affiliations which were completely identified in the conference proceedings. Those in which the identification was lacking, or incomplete (for example, "..... General Electric") have been omitted. In the case of the single-choice author affiliation for those papers prepared by people from different companies, the affiliations of the other authors are not listed. Hence this is not, and should not be construed as, a directory of company participants in the conferences.

#### **ADDENDUM — SUPPLEMENTARY BIBLIOGRAPHY**

Subsequent to the compilation of the subject index, there came to the knowledge of the writer three other conferences on plastics. Two were: on the behavior of plastics in advanced flight vehicle environments (February 1960) and on high modulus glass fibers for structural plastics (October 1960). Both were sponsored by the Wright Air Development Division. The third was on semiconduction in molecular solids, sponsored by Princeton University.

Revision of the subject index to incorporate the papers presented at these meetings, a task which would have seriously delayed publication, was not attempted. However, in order to present as complete a record as possible, the titles of these papers, their authors and company affiliations are given in the supplementary bibliography.

It is again cautioned that these conference papers are not cross-referenced in the body of this report.

### 3. CODE SHEET

#### 1. GENERAL

- 1.1 Test methods
- 1.2 Synthesis
- 1.3 Design of Products
- 1.4 Statistical analysis, quality control
- 1.5 Cost estimating
- 1.6 Plant management
- 1.7 Hazards
- 1.8 Design Criteria
- 1.9 Education, user experience
- 1.10 Specifications
- 1.11 Codes
- 1.12 Nomenclature
- 1.13 Markets
- 1.14 Properties vs processing

#### 2. MATERIALS (POLYMERIC)

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- 2.2 Amino
- 2.3 Epoxy
- 2.4 Urethane
- 2.5 Polyester, alkyd
- 2.6 Polycarbonate
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- 2.8 Polyamide, nylon
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- 2.10 Fluorocarbon
- 2.11 Vinyl, vinyl chloride
- 2.12 Cellulosic
- 2.13 Acrylic
- 2.14 Styrene
- 2.15 Polypropylene
- 2.16 Silicones
- 2.17 Inorganic
- 2.18 Rubbers
- 2.19 Polyethers
- 2.20 New

#### 3. PROPERTIES (DATA)

- 3.1 Mechanical
- 3.2 Rheological
- 3.3 Surface
- 3.4 Optical
- 3.5 Thermal
- 3.6 Electrical
- 3.7 Molecular structure

#### 3. PROPERTIES (DATA) (Continued)

- 3.8 Thermo-mechanical
- 3.9 Stability, aging
- 3.10 Low temperature
- 3.11 High temperature
- 3.12 Ablative
- 3.13 In vacuo
- 3.14 Chemical
- 3.15 Compatibility
- 3.16 Thermo-dynamic
- 3.17 Dynamic
- 3.18 Radiation effects
- 3.19 Damping vibration
- 3.20 Ballistic
- 3.21 Weathering
- 3.22 Crystalline
- 3.23 Transmission (vapor, etc.)
- 3.24 Adhesive
- 3.25 Flammability
- 3.26 High load rate
- 3.27 Thermo-electrical
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#### 4. PROCESSES AND PROCESSING EQUIPMENT

- 4.1 Compression, transfer
- 4.2 Extrusion
- 4.3 Injection
- 4.4 Laminating
- 4.5 Blow molding
- 4.6 Forming
- 4.7 Fabricating
- 4.8 Finishing, decorating
- 4.9 Casting, potting
- 4.10 Sheet and film manufacture
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#### 5. INTERMEDIATE PRODUCTS

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- 5.2 Sheets, rods
- 5.3 Film, coatings
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- 5.5 Laminates
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- 6.2 Building
- 6.3 Electrical
- 6.4 Spacecraft, aircraft, rockets
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- 6.6 Gaskets, O-rings
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- 6.10 Chemical plant, maintenance
- 6.11 Business equipment
- 6.12 Space
- 6.13 Appliances
- 6.14 Rocket nozzle
- 6.15 Gear

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- 7.2 Analysis, theoretical
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**Published in two volumes**

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 Sponsored by: Division of Engineering and Industrial Research  
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Springfield 1, Massachusetts

**Schenectady Varnish Company**  
Schenectady, New York

**Stanray Corporation**  
Chicago, Illinois

**J. P. Stevens & Company, Inc.**  
Industrial Glass Fabrics Department  
1460 Broadway  
New York 36, New York

**Stevens-Chase**  
Camillus, New York

**Structural Fibers, Incorporated**  
Fifth Avenue  
Chadron, Ohio

**Studebaker-Packard Corporation**  
CTL Division  
Cincinnati, Ohio

**Stuttgart Institute of Technology**  
Stuttgart-N  
Holzgartenstrasse 9 A, Germany

**Sull Ross State College**  
Alpine, Texas

**SURFACE, New York City**  
Transit Authority  
25 Jamaica Avenue  
Brooklyn 7, New York

**The Swiss Insulating Works, Ltd.**  
Breitenbach, Switzerland

**Techni-Glas, Incorporated**  
1206 N. W. Hoyt  
Portland, Oregon

**Temco Electronics and Missiles Company**  
P. O. Box 6191  
Dallas, Texas

**Tennessee Eastman Company**  
Kingsport, Tennessee

**Thickol Chemical Corporation**  
Reaction Motors Division  
Denville, New Jersey

**Thompson Ramo Wooldridge, Incorporated**  
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**U. S. Army Engineering Research  
and Development Laboratories**  
Fort Belvoir, Virginia

**U. S. Army Prosthetics Research Laboratory**  
Walter Reed Army Medical Center  
Washington 12, D. C.

**U. S. Army Signal School**  
Fort Monmouth, New Jersey

**U. S. Naval Radiological Defense Laboratory**  
San Francisco 24, California

**U. S. Naval Research Laboratory**  
Washington 25, D. C.

**U. S. Naval Ordnance Laboratory**  
Silver Spring, Maryland

**U. S. Naval Ordnance Test Station**  
China Lake, California

**Underwriters Laboratories**  
Chicago, Illinois

**Union Carbide Plastics Company**  
Bound Brook, New Jersey

**Union Carbide Chemical Company**  
Tarrytown, New York

**Union Carbide Chemical Company**  
South Charleston, West Virginia

**Union Carbide Corporation**  
Tonowanda, New York

**United Electrodynamics, Incorporated**  
Pasadena, California

**United States Gypsum Company**  
300 W. Abams Street  
Chicago 6, Illinois

**United Merchants Industrial Fabrics**  
1407 Broadway  
New York 18, New York

**United States Polymeric  
Chemicals, Incorporated**  
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Stamford, Connecticut

**United States Rubber Company**  
Research Center  
Wayne, New Jersey

**University of Akron**  
Institute of Rubber Research  
Akron, Ohio

**University of Arizona**  
College of Mines  
Tucson, Arizona

**University of Colorado**  
Boulder, Colorado

**University of Florida**  
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**University of Nebraska**  
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**University of New Mexico**  
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**University of Rhode Island**  
Kingston, Rhode Island

**University of Vermont**  
Burlington, Vermont



University of Wisconsin  
Madison, Wisconsin

Vector Manufacturing Company  
Houston, Texas

Vickers Incorporated  
Worcester 3, Massachusetts

Virginia Department of Agriculture  
Richmond 19, Virginia

Vitro Fibras, SA  
Apartado Postal 26813  
Mexico 14, D. F. Mexico

Welding Engineers, Incorporated  
Norristown, Pennsylvania

Western Electric Company  
Baltimore, Maryland

Westinghouse Electric Corporation  
Buffalo, New York

Westinghouse Electric Corporation  
Churchill Borough, Pennsylvania

Westinghouse Electric Corporation  
East Pittsburgh, Pennsylvania

Westinghouse Electric Corporation  
Pittsburgh, Pennsylvania

Westinghouse Electric Corporation  
Hampton, South Carolina

Westinghouse Research Laboratory  
Pittsburgh 35, Pennsylvania

(Wright Air Development Division) Now:  
Aeronautical Systems Division  
Wright-Patterson Air Force Base, Ohio

Wyandotte Chemical Corporation  
Wyandotte, Michigan

## 8. ADDENDUM — SUPPLEMENTARY BIBLIOGRAPHY

Herein are listed the papers presented at three conferences which came to the knowledge of the writer subsequent to the preparation of the subject index. These are given bibliographical treatment only. They are separate and distinct from the coding and cross-reference which comprise the body of this report.

Proceedings: BEHAVIOR OF PLASTICS IN ADVANCED  
FLIGHT VEHICLE ENVIRONMENTS  
Conference: February 1960  
Sponsored by: Plastics Branch, Non Metallic Materials  
Laboratory, Materials Central, Wright Air Develop-  
ment Division, Dayton, Ohio.  
Preprint published as: WADD TR 60-101

### THERMAL PARAMETERS OF RE-ENTRY ABLATIVE PLASTICS

D. L. Schmidt, Wright Air Development Division, p. 1

### THE EFFECTS OF THERMAL ENVIRONMENTAL PARAMETERS ON ABLATION CHARACTERISTICS

W. P. Manos and D. E. Taylor, The University of Chicago, p. 35

### THE EFFECTS OF MATERIAL PARAMETERS ON ABLATION CHARACTERISTICS

H. Halle and S. J. Nicolosi, The University of Chicago, p. 55

### STUDIES ON PLASTICS EXPOSED TO HIGH MASS FLOW THERMAL ENVIRONMENTS

H. S. Schwartz and R. W. Farmer, Wright Air Development Division, p. 87

### A BRIEF REVIEW OF THE ABMA ABLATION MATERIALS PROGRAM

W. R. Lucas and J. E. Kingsbury, Army Ballistic Missile Agency, p. 129

### A STUDY OF THE MECHANISM OF ABLATION OF REINFORCED PLASTICS

D. L. Chamberlain, R. Y. Mixer, and C. W. Marynowski, Stanford Research Institute, p. 151

### THE IMPORTANCE OF CHAR STRUCTURES IN THE ABLATION PERFORMANCE OF ORGANIC POLYMERS

W. T. Barry and W. H. Sutton, General Electric Company, p. 175

### THERMAL STABILITY OF HIGH-TEMPERATURE CARBON-CHAIN POLYMERS

S. L. Madorsky and S. Straus, National Bureau of Standards, p. 195

### USE OF TGA IN STUDYING THERMAL DECOMPOSITION OF POLYMERS

C. D. Doyle, General Electric Company, p. 215

### A STUDY OF HYPERSONIC ABLATION

S. M. Scala, General Electric Company, p. 235

### THE ABLATION OF PLASTICS DURING HYPERSONIC RE-ENTRY

#### PART II: CHEMICAL REACTION RATES FROM TGA DATA

H. L. Friedman, General Electric Company, p. 295

### THE INFRARED EMISSION SPECTRA OF PLASTICS ABLATING IN A LOW ENTHALPY AIR STREAM: MEASUREMENTS OF SURFACE TEMPERATURES AND TEMPERATURE PROFILES BEHIND THE SURFACES

P. L. Hanst and A. C. Walker, Jr., AVCO Corporation, p. 309

**PLASTICS IN ROCKET NOZZLE ENVIRONMENTS**

A. M. Cecka, G. Epstein, and D. L. Robbins, Aerojet-General Corporation, p. 329

**SOLID PROPELLANT ROCKET MOTOR INSULATION**

J. D. Batchelor and N. Vasileff, Atlantic Research Corporation, p. 357

**STRUCTURAL AND INSULATIVE CHARACTERISTICS OF ABLATING PLASTICS**

J. L. Beal, F. A. Vassallo, N. E. Wahl, and G. A. Sterbutzel, Cornell Aeronautical Laboratory, p. 375

**THERMAL DIFFUSIVITY — ITS SIGNIFICANCE AND A METHOD FOR DETERMINATION**

R. W. Farmer, Wright Air Development Division, p. 411

**EFFECTS OF RAPID HEATING ON MECHANICAL PROPERTIES OF COMPOSITES**

C. A. Haudenchild, Goodyear Aircraft Corporation, p. 429

**EFFECTS OF ULTRAVIOLET AND VACUUM ON PROPERTIES OF PLASTICS**

N. E. Wahl, Cornell Aeronautical Laboratory, p. 445

**WADD HIGH TEMPERATURE POLYMER PROGRAM**

A. M. Lovelace, Wright Air Development Division, p. 457

**Proceedings: HIGH MODULUS GLASS FIBERS  
FOR STRUCTURAL PLASTICS**

**Conference: 12 October 1960**

**Sponsored by: Plastics Branch, Non Metallic  
Materials Laboratory, Materials Central,  
Wright Air Development Division, Dayton,  
Ohio.**

**Preprint published as: WADD TR 60-735**

**HIGH MODULUS GLASS FIBERS FOR STRUCTURAL PLASTICS**

**R. L. Tiede, Owens-Corning Fiberglas Corporation, p. 1**

**PROCESSING AND FABRICATION TECHNIQUES FOR REINFORCING PLASTICS WITH  
YM-31-A FIBROUS GLASS**

**A. B. Isham, Owens-Corning Fiberglas Corporation, p. 9**

**PROPERTIES OF HIGH MODULUS REINFORCED PLASTICS**

**G. P. Peterson, Materials Central, WADD, p. 15**

**POTENTIAL USES OF HIGH MODULUS GLASS FIBERS**

**P. Layton, Owens-Corning Fiberglas Corporation, p. 39**

**STRUCTURAL EFFICIENCY OF SANDWICH AS AFFECTED BY ELASTIC MODULUS AND  
WEIGHT OF FACING**

**E. W. Kuenzi, Forest Products Laboratory, p. 43**

**Proceedings: SEMICONDUCTION IN MOLECULAR SOLIDS**  
**Conference: 16-17 February 1960**  
**Sponsored by: Plastics Laboratory, School of Engineering,**  
**Princeton University, Princeton, N. J.**  
**Proceedings privately published**

**PI ELECTRONS AND HOLE PRODUCTION IN ORGANIC MOLECULAR SOLIDS**

S. Mrozowski, Department of Physics, University of Buffalo, p. 1

**A DOMAIN THEORY OF CARRIER BEHAVIOR IN MOLECULAR SOLIDS**

Herbert A. Pohl, Plastics Program, School of Engineering, Princeton University, p. 9

**RECTIFICATION PHENOMENA IN POLYCRYSTALLINE PHTHALOCYANINES**

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**ELECTRONIC PROPERTIES OF SOME ORGANIC COMPOUNDS**

G. P. Brown and S. Aftergut, General Engineering Laboratory, General Electric Company,  
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**SEMICONDUCTOR PROPERTIES OF ORGANIC MOLECULAR COMPLEXES**

Mortimer Labes, Robert A. Sehr, and Monisha Bose, The Franklin Institute, p. 47

**SPATIAL DISTRIBUTION OF TRAPPED ELECTRONS IN PHOTOCONDUCTING ANTHRACENE**

W. Moore, University of North Carolina, and M. Silver, Office of Ordnance Research,  
United States Army, p. 61

**ELECTRIC CHARGE TRANSPORT THROUGH ORGANIC POLYMER FILMS**

John J. Spokas, Radio Corporation of America, p. 69

**CATALYSIS, ELECTRON AND PROTON SPIN RESONANCE AS A METHOD OF STUDYING  
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John Turkevich, Department of Chemistry, Princeton University, p. 85

**SEMICONDUCTION IN ALUMINUM-DOPED PYRO-POLYMERS**

Jacques P. Laherrere and Herbert A. Pohl, Plastics Program, School of Engineering,  
Princeton University, p. 93

**ELECTRONIC PHENOMENA IN GRAPHITES AND CHEMICALLY MODIFIED GRAPHITES**

Gerhart R. Hennig, Argonne National Laboratories, p. 123

Plastics Technical Evaluation Center (PLASTEC) Picatinny Arsenal, Dover, New Jersey  
 SUBJECT INDEX, BIBLIOGRAPHY, AND CODE DESCRIPTION OF  
 TECHNICAL CONFERENCE PAPERS ON PLASTICS: MARCH  
 1960 - FEBRUARY 1961  
 by Arnold E. Molzon

PLASTEC REPORT 8, July 1961, 65 pp. incl. code description  
 sheets, subject index and bibliography (500 items).  
 Unclassified Report

The papers presented at the technical conferences on plastic materials and related technology, within a 1-year period ending on 15 February 1961, have been listed and indexed by subject. Papers (500) from 14 conferences are covered. This report serves as a guide to the subjects presented and by means of a code system, it tells the reader what type of information each article contains. Included are a bibliography, and identification of the company affiliations of the authors.

The conferences were: Spring and Fall meetings, American Chemical Society (Division of Paint, Plastics, and Printing Ink Chemistry); 3d Annual Conference on the Application of Electrical Insulation; 15th Annual Meeting of the American Rocket Society. Industrial

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Glass Fabric Design Engineering Symposium; Symposium on Processing Materials for Re-entry Structures; 17th Annual Technical Conference of the Society of Plastics Engineers; Conference on Plastics in Business Machines; Conference on Plastics vs. Corrosion; 16th Annual Technical and Management Conference of the Reinforced Plastics Division of the Society of the Plastics Industry; 4th JANAF Conference on Elastomer Research and Development; 5th Annual Conference on Technical Progress in Communication Wire and Cable; National Academy of Science Conference on Electrical Insulation; and Conference on Coatings for the Aerospace Environment.

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